

## **REMARKS**

Reconsideration and allowance of the subject application are respectfully requested.

Claims 1, 7, 8, 20 and 21 are pending in this application. Claims 2-6 and 9-19 are cancelled. Claims 1, 7, 8, 20 and 21 have been amended.

Claim 1 has been amended by essentially incorporating subject matter from claims 2, 4 and 6. Additionally, please note that the revised language is supported in the present specification including at page 5, line 17 to page 6, line 3, and at page 7, lines 8-24.

Claims 2, 4 and 6 have accordingly been cancelled. Dependent claims 7, 8, 20 and 21 have been amended to reflect the amendments to claim 1.

No new matter has been added.

In response to the rejection of claims 9-19 under 35 USC 112, second paragraph, please note that these claims are cancelled, thus making this rejection to be moot.

The applicants submit that all presently considered claims are allowable under Section 112, second paragraph.

The applicants respectfully traverse the rejection of claims 1-21 under 35 USC 102(b) or, alternatively, 35 USC 103(a) in view of Ponder et al. This reference does not anticipate the presently claimed invention or make it obvious.

Ponder discloses a material to recover radionuclides, metals and halogenated hydrocarbons from aqueous media contaminated with such substances, wherein the material is a composite including the reaction product of a ferrous salt and an alkali borohydride (see column 2, line 63 to column 3, line 14, and abstract of reference).

In contrast, the presently claimed invention includes an organic compound decomposing agent including an iron suboxide and an iron in admixture.

Thus, the applicants submit that the cited reference does not provide any teaching, suggestion, or motivation that would lead one of ordinary skill in the art to modify the reference teachings to arrive at the presently claimed invention. Nor would a person of ordinary skill find it obvious to try and arrive at the presently claimed invention with a reasonable expectation of success.

The applicants submit that the presently claimed invention is fully allowable under both Section 102(b) and Section 103(a) in view of the prior art.

The applicants respectfully traverse the rejection of claims 1-4, 8, 9, 11, 12, 14, 16, 17, 20 and 21 under 35 USC 102(b) or, alternatively, 35 USC 103(a) in view of Japan 2000334477, (JP '477). This reference does not anticipate the presently claimed invention or make it obvious.

JP '477 discloses a fixed bed circulation reactor for removing nitrate ions from aqueous solution, which contains a fixed bed catalyst and at least one of sulfite, hydrogensulfite, disulfite, sulfite water and gaseous sulfur dioxide (see abstract). The presently claimed invention includes an organic compound decomposing agent including an iron suboxide and an iron in admixture and is not similar to the JP '477 device. In particular, please note that claim 6 is not rejected in view of JP '477 and the subject matter of this claim has been essentially incorporated into claim 1 by amendment, as shown above.

The applicants submit that the presently claimed invention is no where disclosed, suggested or made obvious by the teachings of JP '477. The presently claimed invention is fully allowable under both Section 102(b) and Section 103(a) in

view of the prior art.

The applicants respectfully traverse the rejection of claims 1-12 and 17-21 under 35 USC 102(b) or, alternatively, 35 USC 103(a) in view of Gillham. This reference does not anticipate the presently claimed invention or make it obvious.

Gillham discloses a process for cleaning groundwater contaminated with chlorinated or halogenated organic compounds by providing a body of particles of metal, such as iron, and conducting the groundwater through the body of metal under anaerobic conditions so that the water remains in contact with the metal for a substantial period of time (see column 1, first paragraph, and claim 1). According to the Office Action, Gillham teaches that any portion of the iron that is accessible to oxygen will rust. However, according to the presently claimed invention (for instance see claim 1 as amended above) the iron suboxide and an iron are in admixture and exist independently. Gillham does not disclose, teach or suggest that the iron suboxide and the iron exist separately.

Thus, the applicants submit that the cited reference does not provide any teaching, suggestion, or motivation that would lead one of ordinary skill in the art to modify the reference teachings to arrive at the presently claimed invention. Nor would a person of ordinary skill find it obvious to try and arrive at the presently claimed invention with a reasonable expectation of success.

Further, the applicants point out that claim 13 has not been rejected whereas claim 7, which reads substantially the same as claim 13, has been rejected. The applicants find that Gillham does not disclose or suggest the use of magnetite, hyper-reduced magnetite and berthollide. Accordingly, the applicants submit that claim 7 is allowable.

The applicants assert that the presently claimed invention is allowable under Section 102(b) and Section 103(a).

In view of the above, the applicants submit that the present application is in condition for allowance and a Notice to that effect is respectfully requested.

Respectfully submitted,

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